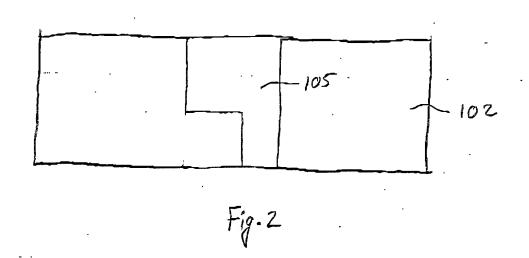


Fig. 1



೯೯೯೬ ೧೫೭೨೮

		302
	Form a copper layer overlying a patterned dielectric layer	
ı		304
	Form a doped layer superjacent the copper layer	
10		306
	Thermally drive dopants from doped layer into copper layer	

Fig. 3

	5	02
	Form a copper layer overlying a patterned dielectric layer	
:	5	04
	Remove excess metal so as to form individual copper interconnect lines	
10	5	06
	Implant dopants into at least the interconnect lines	i

Fig. 5

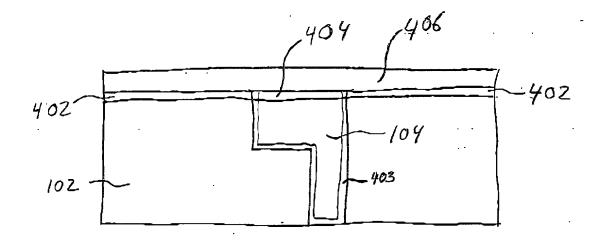
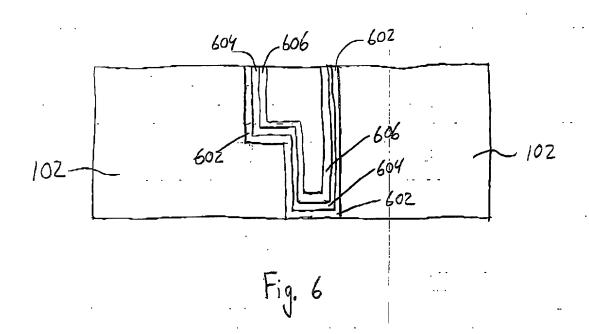


Fig.4



	Pattern a dielectric layer to form at least trenches therein
Į	704
	Form a copper-diffusion barrier over the surfaces of the patterned dielectric
10	layer
1	706
	Deposit a doped seed layer over the barrier layer
	708
	Deposit a capping layer over the doped seed layer without exposing the
15	doped seed layer to the atmosphere

Fig. 7

Pattern a dielectric layer to form at least trenches therein

804

Form a copper diffusion barrier over the surfaces of the patterned dielectric layer

806

Deposit a doped seed layer over the barrier layer

808

Deposit a capping layer over the doped seed layer without exposing the doped seed layer to the atmosphere

810

Deposit a copper layer over the capping layer

812

Thermally drive dopants from doped seed layer to upper portions of copper layer while providing atmosphere that reacts with dopant species